

# Energy Savings Improvement Plan (ESIP) for



# Energy Saving Improvement Program (ESIP)

- P.L. 2009 Ch. 4 Energy Savings Improvement Program (ESIP)- contains specific processes and requirements;
- Public entities can take advantage of energy savings opportunities within the existing building systems
  - Installing energy conservation measures (such as more efficient building controls, boilers, lighting or HVAC equipment)
- Financed through:
  - Refunding Bonds- issued as energy savings obligations; or
  - Lease/Purchase agreement
- Term is for up to 15 years (20 years for Combined Heat/Power);
- An Energy Savings Improvement Plan can be coordinated by a Consultant or ESCO, who may also serve as the general contractor or project manager;





# **ESIP**

#### **General Issues:**

- Must follow public bidding laws;
- The Energy Audit (Step #1) and verification of the Energy Savings Plan must be conducted by independent third parties- these costs can be financed through the bond issue;
- Contractors, ESCOs, Engineers qualifications must be qualified and approved by the State of New Jersey Department of Treasury;





# Township & Schools ESIP Energy Conservation Measures

- 1. HW Boiler and Domestic HW Heater Replacement 2 HW Boilers and 1 Domestic HW Heater
- 2. Boiler System Replacement 4 HW Boilers
- 3. Boiler System Replacement 3 HW Heaters, 2 Domestic HW Heaters
- 4. Rooftop Unit Replacement
- 5. Premium Efficiency Motors
- 6. Library AC Unit Upgrade Controls
- 7. Cafeteria AC Unit Upgrade Controls
- 8. Premium Efficiency Motors
- 9. Valve Blanket Insulation
- 10. WCC Unit Replacement

#### Lighting:

- 1. Lighting Upgrades Township Building and All Schools (over 19,000 bulbs)
- 2. Lighting Controls Installation
- 3. Emergency Lighting Controls





Table 1: NJ ESIP Steps – Duration Range

	Duration hange		
		Min # of	Max # of
Step#	Description	Days	Days
	<b>Local Government Energy Audit</b>		
1	paid by BPU	40	60
	ESP Bid Hire ESCO or		
2	Engineer to Draft ESP	20	40
	- 4		
3	Draft Energy Savings Plan	45	60
	Hire 3rd Party Verifier - Deliver		
4	& Review ESP	25	35
4	& Review ESP	25	33
	LGU makes decisions,		
5	approves - BPU Submit	35	45
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	ESCO or Consultant draft Bid		
6	Specifications	30	45
	Advertises for Contractor		
7	and Receives Formal Bids	45	75
•	Complete EPC Contracts &	4.5	00
8	Financing Documents	45	60
9	Construction	150	210
3	Constituction	130	210
	System Commissioning and		
10	Testing	45	60
	Total	480	630
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## **ESIP**

### Advantages:

- Can enter into shared services agreement for ESIP with a municipality and school districts
- Maintain ownership of assets
- Enter into a sale/leaseback (capital lease)
  - Ownership reverting to the Township upon lease expiration;
- Refunding Bonds and Bond Anticipation Notes ("BANs")
  - can be issued by the Township, School District, or another public agency such as an economic development or county improvement authority.
  - Issuance does not affect debt limits nor require voter approval (in the case of a School District);



